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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,920	10/31/2001	Hideya Kawahara	SUN1P823/P5905	7758

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EXAMINER	
ZHEN, LI B	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/003,920	KAWAHARA, HIDEYA	
	Examiner	Art Unit	
	Li B. Zhen	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9-21,24-34 and 36-39* is/are rejected.

7)☒ Claim(s) *7,8,22,23 and 35* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2001 and 03 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 39 are pending in the application.

Allowable Subject Matter

2. Claims 7, 8, 22, 23 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

3. Applicant's arguments filed 09/15/2006 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated 06/15/2006, applicant argues:

(1) Chan fails to teach claim 1 because it is illogical for the enterprise bean 138 to be both the "newly-created isolated execution unit" and "the target software component". [p. 9, lines 6 – 28]; and

(2) Examiner's allegation with regard to the motivation to combine Toutonghi and Chan is insufficient. [p. 9, line 29 – p. 10, line 9].

As to argument (1), examiner respectfully disagrees and notes that Chan teaches a newly-create isolated execution unit [enterprise bean 138] and target software component [EJBObject interface 134; col. 7, lines 1 – 16]. The EJBObject interface executes within the enterprise bean; therefore, the EJBObject interface in Chan meets the recited target software component.

As to argument (2), examiner disagrees and notes that Chan discloses mapping between component models defined in different development environment [Access Bean 310 may also be mapped to non-Java client environments; col. 6, lines 63 – 67]. In addition, motivation can be found in col. 3, lines 28 – 36 of Toutonghi.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-6, 9, 12, 13, 15-21, 24, 27, 28, 30-34, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,863,889 to Chan et al. [hereinafter Chan] in view of U.S. Patent No. 6,438,744 to Toutonghi et al. [hereinafter Toutonghi].

6. As to claim 1, Chan teaches the invention substantially as claimed including a computer implemented method for an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16] to control or monitor a target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33], the method comprising:

by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16], creating a new isolated execution unit [instantiating an enterprise bean 138; col. 7, lines

15 – 33] for execution of the target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16], wherein the external program is outside of the isolated execution unit [col. 6, line 40 - col. 7, line 16];

starting an intermediary software component within the isolated execution unit newly-created by the external program [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40]; and

establishing a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40] and the external program by the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16], controlling or monitoring target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33], executing in the isolated execution unit newly-created by the external program via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18].

Although Chan teaches the invention substantially, Chan does not specifically disclose indicating an identifier of the target software component to the intermediary software component and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program.

However, Toutonghi teaches an external program [ActiveX client; col. 8, line 60 – col. 9, line 30], an isolated execution unit [COM object; col. 8, lines 60 – 67], indicating

an identifier of the target software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30] and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Chan to incorporate the features of indicating an identifier of the target software component to the intermediary software component and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program as taught by Toutonghi because this allows software developers to map between component models defined in different development environments that can provide for a more complete mapping of component objects and information within the object, while reducing the development and maintenance overhead of current mapping techniques [col. 3, lines 28 – 36 of Toutonghi].

7. As to claim 16, Chan as modified teaches a computer readable medium containing instructions for an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] to control or monitor a target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33 of Chan] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], the computer readable medium comprising:

computer code for creating a new isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] for execution of the target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16 of Chan], wherein the external program is outside of the isolated execution unit [col. 6, line 40 - col. 7, line 16 of Chan];

computer code for starting an intermediary software component within the execution unit newly-created by the external program [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan] and for indicating an identifier of a target software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi];

computer code for starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10 of Toutonghi]; and

computer code for establishing a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan] and the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan],

computer code for the external program to control or monitor the target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database

100; col. 7, lines 15 – 33 of Chan], executing in the isolated execution unit newly-created by the external program via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan]. As to the motivation for combining Chan with Toutonghi, see the rejection to claim 1 above.

8. As to claim 31, Chan as modified teaches a computer implemented system operable to control or monitor a target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33 of Chan] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], comprising:

an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] created by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan];

an intermediary software component within the isolated execution unit [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan]; and

the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan], outside of the isolated execution unit but in the same computer system as the isolated execution unit created by the external program [col. 6, line 43 – col. 7, line 16 of Chan], the external program being configured to indicate an identifier of a target

software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi],

wherein the intermediary software component [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan] is configured to start the target software component having the indicated identifier within the isolated execution unit created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10 of Toutonghi] and establish a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan] and the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] whereby the external program can control or monitor the target software component via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan]. As to the motivation for combining Chan with Toutonghi, see the rejection to claim 1 above.

9. As to claims 2 and 3, Chan as modified teaches the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan] uses an inter isolation communication protocol that is a remote method invocation technique [remote method call; col. 8, line 48 – col. 9, line 7 of Chan].

10. As to claim 4, Chan as modified teaches the communication path is established by the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan].

11. As to claim 5, Chan as modified teaches prior to establishing the communication path, initializing the isolated execution unit into a desired state [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] supplied by the external program [col. 3, line 63 – col. 4, line 12 of Toutonghi].

12. As to claim 6, Chan as modified teaches the isolated execution unit is initialized into the desired state [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], supplied by the external program by the intermediary software component [col. 3, line 63 – col. 4, line 12 of Toutonghi].

13. As to claim 9, Chan as modified teaches indicating an execution control parameter to the intermediary software component [col. 10, lines 55 – col. 11, line 12 of Chan]; and invoking the indicated execution control parameter on the target software component using an application programming interface (API) of the target software component [APIs for a component that is implemented as a Java bean; col. 8, line 63 - col. 9, line 30 of Toutonghi].

14. As to claim 12, Chan as modified teaches receiving a result at the intermediary software component from the target component in response to the invoked execution

control parameter; and sending the result to the external program [col. 9, lines 13 – 33 of Chan].

15. As to claim 13, Chan as modified teaches the intermediary software component sends the result [col. 9, lines 13 – 33 of Chan].

16. As to claim 15, Chan as modified teaches the identifier of the target software component is provided by the external program [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi].

17. As to claims 17 – 21, 24, 27, 28 and 30, these are product claims that correspond to method claims 2 – 6, 9, 12, 13 and 15; note the rejections to claims 2 – 6, 9, 12, 13 and 15 above, which also meet these product claims.

18. As to claims 32 – 34, 36 and 38, these are system claims that correspond to method claims 2, 3, 6, 9 and 12; note the rejections to claims 2, 3, 6, 9 and 12 above, which also meet these system claims.

19. Claims 10, 11, 14, 25, 26, 29, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan and Toutonghi further in view of U.S. Patent No. 6,609,158 to Nevarez et al. [hereinafter Nevarez, cited in previous office action].

20. As to claim 10, Chan as modified teaches execution control parameter [col. 10, lines 55 – col. 11, line 12 of Chan] and the RMI inter isolation communication protocol

[remote method call; col. 8, line 48 – col. 9, line 7 of Chan], but does not specify translating a request from a first format to a second format.

However, Nevarez teaches a translator [a universal language adapter 226; col. 10, lines 5 – 20] for translating a request in a first format to a second format that is acceptable by the API of the target software component [core 228 is thus a mapping layer or engine which converts script commands from the universal language adapter 226 into calls to the object model adapter 230; col. 10, lines 5 - 20].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify the invention of Chan and Toutonghi to incorporate the features of a translator for translating a request in a first format to a second format that is acceptable by the API of the target software component as taught by Nevarez because this makes it easier for programs written according to different languages and/or different object models to communicate with each other and allows connection of disparate software components [col. 4, lines 9 - 11 and 29 - 30 of Nevarez].

21. As to claim 11, Chan as modified teaches the intermediary software component performs the translation [col. 10, lines 5 – 20 of Nevarez].

22. As to claims 14 and 39, Chan as modified teaches the result has a first format that is acceptable by the API of the target software component [remote provider 230 accepts calls from the object model adapter 246, uses standard network technology such as the remote bridge 248 to contact remote objects, and relays parameters and

results; col. 10, lines 45 – 50 of Nevarez], the method further comprising translating the first format into a second format that is an inter isolation communication protocol before sending the result to the external program [col. 10, lines 5 – 20 of Nevarez].

23. As to claims 25, 26 and 29, these are product claims that correspond to method claims 10, 11 and 14; note the rejections to claims 10, 11 and 14 above, which also meet these product claims.

24. As to claim 37, this is a system claim that corresponds to method claim 10; note the rejection to claim 10 above, which also meet this system claim.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONTACT INFORMATION

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2194

LBZ

SUPERVISORY PATENT EXAMINER